

WEST Search History

DATE: Tuesday, September 23, 2003

<u>Set Name</u>	<u>Query</u>	<u>Hit Count</u>	<u>Set Name</u>
side by side			result set
	<i>DB=USPT,PGPB; PLUR=YES; OP=ADJ</i>		
L21	118 not polyurethane not polyisocyanate not polyester	31	L21
	<i>DB=JPAB,EPAB,DWPI,TDBD; PLUR=YES; OP=ADJ</i>		
L20	118 not polyurethane not polyisocyanate not polyester	0	L20
	(((trimethylolpropane or (trimethylol adj propane))or (((tri\$1 or tetrakis) adj2 hydroxymethyl adj propane) or (bis adj2 hydroxymethyl adj2 butanol) or (ethyl adj2 hydroxymethyl adj4 (propanediol or propane adj diol)) or ethriol or ettriol)or (ethyltrimethylolmethane or (ethyltrimethylol adj methane) or (ethyl adj trimethylol adj methane) or (ethyl adj trimethylolmethane)))near5 (((curing or hardening or crosslinking or (cross adj linking)) adj agent) or hardener or crosslinker or (cross adj linker) or curative)) and ((epox?\$3 adj resin) or diepox?\$3 or polyepox?\$3 or diglycidyl\$ or polyglycidyl\$))	17	L19
	<i>DB=USPT,PGPB; PLUR=YES; OP=ADJ</i>		
L18	116 and 117	396	L18
L17	(epox?\$3 adj resin) or diepox?\$3 or polyepox?\$3 or diglycidyl\$ or polyglycidyl\$	95366	L17
L16	15 near5 (((curing or hardening or crosslinking or (cross adj linking)) adj agent) or hardener or crosslinker or (cross adj linker) or curative)	1087	L16
L15	113 not polyester not polyurethane	59	L15
	<i>DB=JPAB,EPAB,DWPI,TDBD; PLUR=YES; OP=ADJ</i>		
L14	(((trimethylolpropane or (trimethylol adj propane))or (((tri\$1 or tetrakis) adj2 hydroxymethyl adj propane) or (bis adj2 hydroxymethyl adj2 butanol) or (ethyl adj2 hydroxymethyl adj4 (propanediol or propane adj diol)) or ethriol or ettriol)or (ethyltrimethylolmethane or (ethyltrimethylol adj methane) or (ethyl adj trimethylol adj methane) or (ethyl adj trimethylolmethane)))and (tetramethylguanidine or (tetramethyl adj guanidine)))	1	L14

and imidazole)

DB=USPT,PGPB; PLUR=YES; OP=ADJ

L13	17 and imidazole	174	L13
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DB=JPAB,EPAB,DWPI,TDBD; PLUR=YES; OP=ADJ

L12	(((trimethylolpropane or (trimethylol adj propane))or (((tri\$1 or tetrakis) adj2 hydroxymethyl adj propane) or (bis adj2 hydroxymethyl adj2 butanol) or (ethyl adj2 hydroxymethyl adj4 (propanediol or propane adj diol)) or ethriol or ettriol)or (ethyltrimethylolmethane or (ethyltrimethylol adj methane) or (ethyl adj trimethylol adj methane) or (ethyl adj trimethylolmethane)))and (tetramethylguanidine or (tetramethyl adj guanidine))) and (((bis or di) adj2 hydroxymethyl adj3 (cresol or methylphenol)) or (dimethylol adj3 (methylphenol or cresol)) or dimethylolcresol or dimethylolmethylphenol)or ((hydroxy adj2 methyl adj4 benzenedimethanol))))	0	L12
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DB=USPT,PGPB; PLUR=YES; OP=ADJ

L11	17 and 110	2	L11
L10	18 or 19	247	L10
L9	(hydroxy adj2 methyl adj4 benzenedimethanol)	2	L9
L8	((bis or di) adj2 hydroxymethyl adj3 (cresol or methylphenol)) or (dimethylol adj3 (methylphenol or cresol)) or dimethylolcresol or dimethylolmethylphenol	245	L8
L7	15 and 16	523	L7
L6	tetramethylguanidine or (tetramethyl adj guanidine)	2109	L6
L5	12 or 13 or 14	39316	L5
L4	ethyltrimethylolmethane or (ethyltrimethylol adj methane) or (ethyl adj trimethylol adj methane) or (ethyl adj trimethylolmethane)	1	L4
L3	(((tri\$1 or tetrakis) adj2 hydroxymethyl adj propane) or (bis adj2 hydroxymethyl adj2 butanol) or (ethyl adj2 hydroxymethyl adj4 (propanediol or propane adj diol)) or ethriol or ettriol	802	L3
L2	trimethylolpropane or (trimethylol adj propane)	38953	L2
L1	trimethylolpropane or (trimethylol adj propane)]	30189	L1

END OF SEARCH HISTORY

683,984

WEST Search History

DATE: Tuesday, September 23, 2003

Set Name Query

side by side

Hit Count Set Name

result set

DB=JPAB,EPAB,DWPI,TDBD; PLUR=YES; OP=ADJ

L7 ((epox?\$3 adj resin) or diepox?\$3 or polyepox?\$3 or diglycidyl\$ or polyglycidyl\$) and ((((bis or di) adj2 hydroxymethyl adj3 (cresol or methylphenol)) or (dimethylol adj3 (methylphenol or cresol)) or dimethylolcresol or dimethylolmethylphenol) or ((hydroxy adj2 methyl adj4 benzenedimethanol))) or imidazole or imadazole) and (tetramethylguanidine or (tetramethyl adj guanidine))

6 L7

DB=USPT,PGPB; PLUR=YES; OP=ADJ

L6 12 and 14 and 15

26 L6

L5 (tetramethylguanidine or (tetramethyl adj guanidine)) near7 13

233 L5

L4 ((((bis or di) adj2 hydroxymethyl adj3 (cresol or methylphenol)) or (dimethylol adj3 (methylphenol or cresol)) or dimethylolcresol or dimethylolmethylphenol) or ((hydroxy adj2 methyl adj4 benzenedimethanol))) or imidazole or imadazole) near7 13

3320 L4

L3 ((crosslinking or (cross adj linking) or curing or hardening) adj agent) or hardener or curative or crosslinker or (cross adj linker) or accelerator or catalyst

383242 L3

L2 (epox?\$3 adj resin) or diepox?\$3 or polyepox?\$3 or diglycidyl\$ or polyglycidyl\$

95366 L2

L1 (epox?\$3 adj resin) or diepox?\$3 or polyepox?\$3 or diglycidyl? or polyglycidyl?

91275 L1

END OF SEARCH HISTORY

WEST Search History

DATE: Tuesday, September 23, 2003

Set Name Query

side by side

Hit Count Set Name

result set

DB=JPAB,EPAB,DWPI,TDBD; PLUR=YES; OP=ADJ

L3 (diethanolamine or (diethanol adj amine) or
diethylaminopropylamine or (diethyl adj
aminopropylamine) or (diethylaminopropyl adj amine)
or (diethyl adj aminopropyl adj amine)) and (cresol or
methylphenol) and (formaldehyde or formalin\$2)

8 L3

DB=USPT,PGPB; PLUR=YES; OP=ADJ

L2 (cresol or methylphenol) near7 (formaldehyde or
formalin\$2) near7 11

4 L2

L1 diethanolamine or (diethanol adj amine) or
diethylaminopropylamine or (diethyl adj
aminopropylamine) or (diethylaminopropyl adj amine)
or (diethyl adj aminopropyl adj amine)

30953 L1

END OF SEARCH HISTORY

683,984

(FILE 'HOME' ENTERED AT 12:58:37 ON 23 SEP 2003)

FILE 'CAPLUS' ENTERED AT 12:58:57 ON 23 SEP 2003

L1 163627 S (25085-99-8# OR 25068-38-6#)/RN OR (EPOX!###(3A)RESIN###)

OR

L2 163936 S L1 OR 1675-54-3#/RN

L3 13130 S (288-32-4# OR 91-04-3#)/RN

S 80-70-6#/RN OR 80-70-6/CRN

FILE 'REGISTRY' ENTERED AT 13:01:50 ON 23 SEP 2003

L4 237 S 80-70-6/CRN

FILE 'CAPLUS' ENTERED AT 13:01:51 ON 23 SEP 2003

L5 263 S L4

L6 885 S 80-70-6#/RN OR L5

L7 7 S L2 AND L3 AND L6

683,984

(FILE 'HOME' ENTERED AT 11:43:12 ON 23 SEP 2003)

FILE 'REGISTRY' ENTERED AT 11:43:43 ON 23 SEP 2003

L1 243400 S IMIDAZOLE
L2 1 S 288-32-4/RN
L3 1 S 77-99-6/RN
L4 421 S TETRAMETHYLGUANIDINE
L5 25 S BIS(3W)HYDROXYMETHYL(3W)CRESOL

FILE 'CAPLUS' ENTERED AT 11:49:44 ON 23 SEP 2003

L6 331 S 91-04-3#/RN
L7 12801 S 288-32-4#/RN
L8 5522 S 77-99-6#/RN
L9 673 S 80-70-6#/RN
L10 2 S (L6 OR L7) AND L8 AND L9

(FILE 'HOME' ENTERED AT 14:11:49 ON 23 SEP 2003)

FILE 'REGISTRY' ENTERED AT 14:12:53 ON 23 SEP 2003

L1 1 S 95-48-7/RN
L2 1 S 108-39-4/RN
L3 1 S 106-44-5

FILE 'REGISTRY' ENTERED AT 14:14:12 ON 23 SEP 2003

SET TERMSET E#
DEL SEL Y
SEL L2 1 RN
L4 1 S 50-00-0/RN
L5 6 S DIETHYLAMINOPROPYLAMINE
L6 1 S 104-78-9/RN
L7 1 S 111-42-2#/RN

FILE 'CAPLUS' ENTERED AT 14:18:50 ON 23 SEP 2003

S 106-44-5#/RN OR 106-44-5#/CRN

FILE 'REGISTRY' ENTERED AT 14:19:21 ON 23 SEP 2003

L8 1291 S 106-44-5#/CRN

FILE 'CAPLUS' ENTERED AT 14:19:21 ON 23 SEP 2003

L9 3350 S L8
L10 16712 S 106-44-5#/RN OR L9
S 50-00-0#/RN OR 50-00-0#/CRN

FILE 'REGISTRY' ENTERED AT 14:19:39 ON 23 SEP 2003

L11 24620 S 50-00-0#/CRN

FILE 'CAPLUS' ENTERED AT 14:19:40 ON 23 SEP 2003

L12 73721 S L11
L13 132403 S 50-00-0#/RN OR L12
S 104-78-9#/RN OR 104-78-9#/CRN

FILE 'REGISTRY' ENTERED AT 14:20:11 ON 23 SEP 2003

L14 82 S 104-78-9#/CRN

FILE 'CAPLUS' ENTERED AT 14:20:11 ON 23 SEP 2003

L15 70 S L14
L16 1108 S 104-78-9#/RN OR L15
S 111-42-2#/RN OR 111-42-2#/CRN

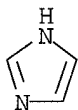
FILE 'REGISTRY' ENTERED AT 14:20:29 ON 23 SEP 2003

L17 4270 S 111-42-2#/CRN

FILE 'CAPLUS' ENTERED AT 14:20:29 ON 23 SEP 2003

L18 3292 S L17
L19 14659 S 111-42-2#/RN OR L18
L20 29 S L10 AND L13 AND (L16 OR L19)

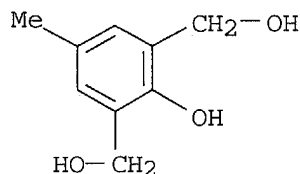
RN 288-32-4 REGISTRY
 CN 1H-Imidazole (9CI) (CA INDEX NAME)
 OTHER CA INDEX NAMES:
 CN Imidazole (8CI)
 OTHER NAMES:
 CN 1,3-Diaza-2,4-cyclopentadiene
 CN 1,3-Diazole
 CN Glyoxalin
 CN Glyoxaline
 CN Imidazol
 CN Imutex
 CN Methanimidamide, N,N'-1,2-ethenediyl-
 CN Miazole
 CN NSC 60522
 FS 3D CONCORD
 DR 146117-15-9, 116421-26-2
 MF C3 H4 N2
 CI COM, RPS
 LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*,
 BIOBUSINESS,
 BIOSIS, BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN,
 CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHM, CSNB, DDFU, DETHERM*,
 DRUGU, EMBASE, GMELIN*, HODOC*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE,
 MRCK*, MSDS-OHS, NAPRALERT, NIOSHTIC, PIRA, PROMT, RTECS*, SPECINFO,
 SYNTHLINE, TOXCENTER, TULSA, ULIDAT, USPAT2, USPATFULL, VETU
 (*File contains numerically searchable property data)
 Other Sources: DSL**, EINECS**, TSCA**
 (**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

12769 REFERENCES IN FILE CA (1907 TO DATE)
 2006 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
 12787 REFERENCES IN FILE CAPLUS (1907 TO DATE)
 101 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

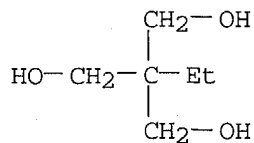
RN 91-04-3 REGISTRY
 CN 1,3-Benzenedimethanol, 2-hydroxy-5-methyl- (9CI) (CA INDEX NAME)
 OTHER CA INDEX NAMES:
 CN .alpha.1,.alpha.3-Mesitylenediol, 2-hydroxy- (6CI, 7CI, 8CI)
 OTHER NAMES:
 CN .alpha.1,.alpha.3,2-Trihydroxymesitylene
 CN 2,6-Bis(hydroxymethyl)-4-methylphenol
 CN **2,6-Bis(hydroxymethyl)-p-cresol**
 CN 2,6-Di(hydroxymethyl)-p-cresol
 CN 2,6-Dimethylol-4-methylphenol
 CN 2,6-Dimethylol-p-cresol
 CN 2-Hydroxy-5-methyl-1,3-benzenedimethanol
 CN NSC 15838
 FS 3D CONCORD
 DR 312714-78-6
 MF C9 H12 O3
 CI COM
 LC STN Files: BEILSTEIN*, BIOSIS, CA, CAOLD, CAPLUS, CASREACT, CHEMCATS,
 CHEMINFORMRX, CHEMLIST, CSChem, HODOC*, IFICDB, IFIPAT, IFIUDB,
 MSDS-OHS, PIRA, RTECS*, SPECINFO, TOXCENTER, USPAT2, USPATFULL
 (*File contains numerically searchable property data)
 Other Sources: DSL**, EINECS**, TSCA**
 (**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

329 REFERENCES IN FILE CA (1907 TO DATE)
 12 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
 329 REFERENCES IN FILE CAPLUS (1907 TO DATE)
 20 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

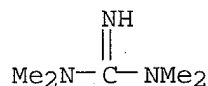
RN 77-99-6 REGISTRY
 CN 1,3-Propanediol, 2-ethyl-2-(hydroxymethyl)- (8CI, 9CI) (CA INDEX NAME)
 OTHER NAMES:
 CN 1,1,1-Tetrakis(hydroxymethyl)propane
 CN 1,1,1-Tri(hydroxymethyl)propane
 CN 1,1,1-Trimethylolpropane
 CN 1,1,1-Tris(hydroxymethyl)propane
 CN 2,2-Bis(hydroxymethyl)-1-butanol
 CN 2-Ethyl-2-(hydroxymethyl)-1,3-propanediol
 CN 2-Ethyl-2-(hydroxymethyl)propanediol
 CN Ethriol
 CN Ethyltrimethylolmethane
 CN Ettriol
 CN NSC 3576
 CN Propane, 1,1,1-tris(hydroxymethyl)-
 CN RC Crosslinker TR
 CN TMP
 CN TMP (alcohol)
 CN Trimethylolpropane
 CN Tris(hydroxymethyl)propane
 FS 3D CONCORD
 DR 53632-31-8, 59218-55-2, 97649-49-5, 101164-61-8, 102984-18-9, 51811-73-5,
 65581-89-7, 69896-09-9, 77974-02-8, 30774-18-6, 110368-52-0
 MF C6 H14 O3
 CI COM
 LC STN Files: AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*, BIOBUSINESS, BIOSIS,
 CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS,
 CHEMINFORMRX, CHEMLIST, CIN, CSChem, CSNB, DETHERM*, DIOGENES, DIPPR*,
 ENCOMPLIT, ENCOMPLIT2, ENCOMPAT, ENCOMPAT2, HODOC*, HSDB*, IFICDB,
 IFIPAT, IFIUDB, MEDLINE, MSDS-OHS, NIOSHTIC, PDLCOM*, PIRA, PROMT,
 RTECS*, SPECINFO, TOXCENTER, TULSA, ULIDAT, USPAT2, USPATFULL, VTB
 (*File contains numerically searchable property data)
 Other Sources: DSL**, EINECS**, TSCA**
 (**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

5509 REFERENCES IN FILE CA (1907 TO DATE)
 2778 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
 5520 REFERENCES IN FILE CAPLUS (1907 TO DATE)
 143 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

RN 80-70-6 REGISTRY
 CN Guanidine, N,N,N',N'-tetramethyl- (9CI) (CA INDEX NAME)
 OTHER CA INDEX NAMES:
 CN Guanidine, 1,1,3,3-tetramethyl- (6CI, 8CI)
 OTHER NAMES:
 CN **1,1,3,3-Tetramethylguanidine**
 CN **N,N,N',N'-Tetramethylguanidine**
 CN **N1,N1,N3,N3-Tetramethylguanidine**
 CN NSC 148309
 FS 3D CONCORD
 DR 142118-43-2, 197451-33-5
 MF C5 H13 N3
 CI COM
 LC STN Files: BEILSTEIN*, BIOSIS, CA, CAOLD, CAPLUS, CASREACT, CHEMCATS,
 CHEMINFORMRX, CHEMLIST, CSCHEM, DETHERM*, GMELIN*, HODOC*, IFICDB,
 IFIPAT, IFIUDB, MSDS-OHS, SPECINFO, SYNTHLINE, TOXCENTER, USPAT2,
 USPATFULL
 (*File contains numerically searchable property data)
 Other Sources: DSL**, EINECS**, TSCA**
 (**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

670 REFERENCES IN FILE CA (1907 TO DATE)
 34 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
 673 REFERENCES IN FILE CAPLUS (1907 TO DATE)
 15 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

AN 2002:488263 CAPLUS
 DN 137:48015
 TI Epoxy hardeners for improved properties, processing and handling
 IN Schile, Richard D.
 PA USA
 SO U.S. Pat. Appl. Publ., 13 pp., Cont.-in-part of U.S. Ser. No. 714,043.
 CODEN: USXXCO
 DT Patent
 LA English
 IC ICM C08G059-68
 NCL 528094000
 CC 37-6 (Plastics Manufacture and Processing)
 FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2002082379	A1	20020627	US 2002-683984	20020308
	US 6491845	B1	20021210	US 2000-714043	20001116
PRAI	US 2000-714043	A2	20001116		

AB An epoxy hardener compn. having a cure temp. of 60-100.degree. comprises
 a

mixt. of: (a) one of imidazole and a trihydric compd. having methylol
 groups at the 2- and 6- positions formed by reacting a 4-alkyl phenol
 with
 2 mol of formaldehyde; (b) trimethylolpropane; and (c) one of
 tetramethylguanadine and tetramethylguanadine adduct. The hardeners have
 the capability of curing at lower temps. than currently available
 hardeners while retaining superior mech. and thermal properties.
 Accelerators and other materials are added as needed to modify the cure
 time and temp. to suit particular applications. A method for making the
 hardener is also disclosed.

ST hardener imidazole trimethylolpropane tetramethylguanadine epoxy resin
 IT Adhesives

Crosslinking agents
 (epoxy hardeners for improved properties, processing and handling)

IT Epoxy resins, reactions
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (epoxy hardeners for improved properties, processing and handling)

IT Amines, reactions
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (tertiary, hardener mixt.; epoxy hardeners for improved properties,
 processing and handling)

IT 80-70-6DP, reaction products with epoxy resins 111-40-0DP,
 Diethylenetriamine, reaction products with trimethylolpropane-bisphenol A
 reaction products 96141-20-7DP, EPON862, reaction products with
 tetramethylguanidine

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation);

RACT
 (Reactant or reagent)
 (epoxy hardeners for improved properties, processing and handling)

IT 25068-38-6, EPON828
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (epoxy hardeners for improved properties, processing and handling)

IT 77-99-6DP, Trimethylolpropane, reaction products with
 butylglycidyl ether 80-05-7DP, Bisphenol A, reaction products with
 trimethylolpropane 108-46-3DP, Resorcinol, reaction products with
 trimethylolpropane 120-80-9DP, Catechol, reaction products with
 bisphenol A epoxy resin 2210-79-9DP, o-Cresyl glycidylether, reaction
 products with trimethylolpropane 2426-08-6DP, Butylglycidyl ether,
 reaction products with trimethylolpropane 25068-38-6DP, EPON828,

reaction products with catechol

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation);

RACT

(Reactant or reagent)

(hardener mixt.; epoxy hardeners for improved properties, processing and handling)

IT

77-99-6, Trimethylolpropane **80-70-6** **91-04-3**,

2, 6-Bis(hydroxymethyl)-p-cresol **288-32-4**, Imidazole, reactions

RL: RCT (Reactant); RACT (Reactant or reagent)

(hardener mixt.; epoxy hardeners for improved properties, processing and handling)

AN 2002:408713 CAPLUS
 DN 136:402611
 TI Novel epoxy hardeners for improved properties, processing, and handling
 IN Schile, Richard D.
 PA USA
 SO PCT Int. Appl., 41 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 IC ICM C08G
 CC 37-6 (Plastics Manufacture and Processing)
 FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002042349	A2	20020530	WO 2001-US50715	20011107
	WO 2002042349	A3	20020906		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	US 6491845	B1	20021210	US 2000-714043	20001116
	AU 2002039716	A5	20020603	AU 2002-39716	20011107
PRAI	US 2000-714043	A	20001116		
	WO 2001-US50715	W	20011107		
AB	Novel hardeners for epoxy resins are disclosed which have the capability of curing at lower temps. than currently available hardeners while retaining superior mech. and thermal properties. These novel hardeners include a range of reactivity which results in a range of pot lives from minutes to months. These materials co-cure readily with polyamines and have little or no amine odor. Mixt. viscosity can be controlled over a wide range independent of filler concn. which allows a broad range of applications from coating and casting to adhesives. Class I hardeners contain a mixt. of polyols, polyamines and tertiary amines and cure at temps. between 20-50.degree., while class II hardeners have the same polyols mixed with one or more tertiary amines and cure between 65-100.degree.. Class III hardeners contain the same polyols combined with either imadazole or dicyandiamide, optionally, a tertiary amine and cure at 120.degree..				
ST	epoxy curing agent polyol polyamine tertiary amine combination				
IT	Crosslinking agents (epoxy hardener based on polyol-polyamine-tertiary amine combination)				
IT	Epoxy resins, uses RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses) (epoxy hardener based on polyol-polyamine-tertiary amine combination)				
IT	Amines, uses RL: MOA (Modifier or additive use); USES (Uses) (polyamines, nonpolymeric; epoxy hardener based on polyol-polyamine-tertiary amine combination)				
IT	Alcohols, uses RL: MOA (Modifier or additive use); USES (Uses) (polyhydric; epoxy hardener based on polyol-polyamine-tertiary amine combination)				
IT	Amines, uses				

RL: MOA (Modifier or additive use); USES (Uses)
 (tertiary; epoxy hardener based on polyol-polyamine-tertiary amine combination)

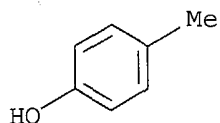
IT 77-99-6DP, Trimethylolpropane, reaction products 80-05-7DP, Bisphenol A, ring-substitution reaction products with trimethylolpropane 108-46-3DP, Resorcinol, ring-substitution reaction products with trimethylolpropane 120-80-9DP, Catechol, adducts with glycidyl compds. 2426-08-6DP, Butyl glycidyl ether, reaction products with polyols 25068-38-6DP, Epon 828, adducts with catechol
 RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)
 (epoxy hardener based on polyol-polyamine-tertiary amine combination)

IT 77-99-6, Trimethylolpropane 80-70-6 91-04-3, 2,6-Bis(hydroxymethyl)-p-cresol 103-83-3, Dimethylbenzylamine 104-78-9, 3-(N,N-Diethylamino)propylamine 106-44-5, p-Cresol, uses 107-15-3, Ethylenediamine, uses 109-01-3, 1-Methylpiperazine 111-40-0, Diethylenetriamine 111-42-2, Diethanolamine, uses 112-24-3, Triethylenetetramine 112-57-2, Tetraethylenepentamine 288-32-4, Imidazole, uses 461-58-5, Dicyandiamide 2664-63-3, 4,4'-Thiodiphenol
 RL: MOA (Modifier or additive use); USES (Uses)
 (epoxy hardener based on polyol-polyamine-tertiary amine combination)

IT 25068-38-6, Epon 828
 RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
 (epoxy hardener based on polyol-polyamine-tertiary amine combination)

IT 2210-79-9DP, o-Cresyl glycidyl ether, reaction products with trimethylolpropane
 RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)
 (reaction involves both epoxy group and arom. ring; epoxy hardener based on polyol-polyamine-tertiary amine combination)

RN 106-44-5 REGISTRY
 CN Phenol, 4-methyl- (9CI) (CA INDEX NAME)
 OTHER CA INDEX NAMES:
 CN p-Cresol (8CI)
 OTHER NAMES:
 CN 1-Hydroxy-4-methylbenzene
 CN 4-Cresol
 CN 4-Hydroxytoluene
 CN 4-Methylphenol
 CN NSC 3696
 CN p-Cresylic acid
 CN p-Hydroxytoluene
 CN p-Methylhydroxybenzene
 CN p-Methylphenol
 CN p-Oxytoluene
 CN p-Toluol
 CN p-Tolyl alcohol
 FS 3D CONCORD
 MF C7 H8 O
 CI COM
 LC STN Files: AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*, BIOBUSINESS, BIOSIS,
 BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN,
 CHEMCATS, CHEMINFORMRX, CHEMLIST, CHEMSAFE, CIN, CSCHEM, CSNB, DDFU,
 DETHERM*, DIPPR*, DRUGU, EMBASE, GMELIN*, HODOC*, HSDB*, IFICDB,
 IFIPAT,
 IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS, NIOSHTIC, PDLCOM*, PIRA, PROMT,
 RTECS*, SPECINFO, SYNTHLINE, TOXCENTER, ULIDAT, USPAT2, USPATFULL, VTB
 (*File contains numerically searchable property data)
 Other Sources: DSL**, EINECS**, TSCA**
 (**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

13516 REFERENCES IN FILE CA (1907 TO DATE)
 343 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
 13544 REFERENCES IN FILE CAPLUS (1907 TO DATE)
 13 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

RN 111-42-2 REGISTRY
 CN Ethanol, 2,2'-iminobis- (9CI) (CA INDEX NAME)
 OTHER CA INDEX NAMES:
 CN Ethanol, 2,2'-iminodi- (8CI)
 OTHER NAMES:
 CN 2,2'-Dihydroxydiethylamine
 CN 2,2'-Iminobis[ethanol]
 CN 2,2'-Iminodi-1-ethanol
 CN 2,2'-Iminodiethanol
 CN 2-[(2-Hydroxyethyl)amino]ethanol
 CN Bis(2-hydroxyethyl)amine
 CN Bis(hydroxyethyl)amine
 CN Dabco DEOA-LF
 CN DEA
 CN Di(.beta.-hydroxyethyl)amine
 CN Di(2-hydroxyethyl)amine
 CN Diethanolamine
 CN Diolamine
 CN Iminodiethanol
 CN N,N'-Iminodiethanol
 CN N,N-Bis(2-hydroxyethyl)amine
 CN N,N-Diethanolamine
 CN Niox DEOA-LF
 CN NSC 4959
 FS 3D CONCORD
 DR 8033-73-6
 MF C4 H11 N O2
 CI COM
 LC STN Files: AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*, BIOBUSINESS, BIOSIS,
 BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS,
 CHEMINFORMRX, CHEMLIST, CHEMSAFE, CIN, CSCHEM, CSNB, DDFU, DETHERM*,
 DIOGENES, DIPPR*, DRUGU, EMBASE, ENCOMPLIT, ENCOMPLIT2, ENCOMPPAT,
 ENCOMPPAT2, GMELIN*, HODOC*, HSDB*, IFICDB, IFIPAT, IFIUDB, IPA,
 MEDLINE, MRCK*, MSDS-OHS, NAPRALERT, NIOSHTIC, PDLCOM*, PIRA, PROMT,
 RTECS*, SPECINFO, SYNTHLINE, TOXCENTER, TULSA, ULIDAT, USAN, USPAT2,
 USPATFULL, VTB
 (*File contains numerically searchable property data)
 Other Sources: DSL**, EINECS**, TSCA**
 (**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

11704 REFERENCES IN FILE CA (1907 TO DATE)
 2832 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
 11717 REFERENCES IN FILE CAPLUS (1907 TO DATE)
 21 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

RN 104-78-9 REGISTRY
 CN 1,3-Propanediamine, N,N-diethyl- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)
 OTHER NAMES:
 CN .gamma.-(Diethylamino)propylamine
 CN 1-Amino-3-(diethylamino)propane
 CN 3-(Diethylamino)-n-propylamine
 CN 3-(Diethylamino)propanamine
 CN 3-(Diethylamino)propylamine
 CN 3-(N,N-Diethylamino)-1-propylamine
 CN 3-(N,N-Diethylamino)propylamine
 CN 3-Diethylamino-1-propylamine
 CN Diethylaminotrimethylenamine
 CN N,N-Diethyl-1,3-diaminopropane
 CN N,N-Diethyl-1,3-propanediamine
 CN N,N-Diethyl-1,3-propylenediamine
 CN N,N-Diethyltrimethylenediamine
 CN N-(3-Diethylaminopropyl)amine
 CN N-(Diethylaminopropyl)amine
 CN NSC 7776
 FS 3D CONCORD
 MF C7 H18 N2
 CI COM
 LC STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS, CASREACT, CBNB, CHEMCATS,
 CHEMINFORMRX, CHEMLIST, CHEMSAFE, CSCHEM, DETHERM*, GMELIN*, HODOC*,
 IFICDB, IFIPAT, IFIUDB, MSDS-OHS, RTECS*, SPECINFO, SYNTHLINE,
 TOXCENTER, USPAT2, USPATFULL
 (*File contains numerically searchable property data)
 Other Sources: DSL**, EINECS**, TSCA**
 (**Enter CHEMLIST File for up-to-date regulatory information)

H₂N-(CH₂)₃-NEt₂

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1053 REFERENCES IN FILE CA (1907 TO DATE)
 240 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
 1054 REFERENCES IN FILE CAPLUS (1907 TO DATE)
 35 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

RN 50-00-0 REGISTRY
 CN Formaldehyde (8CI, 9CI) (CA INDEX NAME)
 OTHER NAMES:
 CN BFV
 CN F-gen
 CN Fannoform
 CN Floguard 1015
 CN FM 282
 CN Fordor
 CN Formalin
 CN Formalith
 CN Formic aldehyde
 CN Formol
 CN Fyde
 CN Lysoform
 CN Methaldehyde
 CN Methanal
 CN Methyl aldehyde
 CN Methylene oxide
 CN Morbucid
 CN NSC 298885
 CN Oxomethane
 CN Oxymethylene
 CN Paraform
 CN Superlysoform
 FS 3D CONCORD
 DR 8005-38-7, 8006-07-3, 8013-13-6, 112068-71-0
 MF C H2 O
 CI COM
 LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*,
 BIOBUSINESS,
 BIOSIS, BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB,
 CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CHEMSAFE, CIN, CSCHM, CSNB,
 DDFU, DETHERM*, DIOGENES, DIPPR*, DRUGU, EMBASE, ENCOMPLIT, ENCOMPLIT2,
 ENCOMPPAT, ENCOMPPAT2, GMELIN*, HODOC*, HSDB*, IFICDB, IFIPAT, IFIUDB,
 IPA, MEDLINE, MRCK*, MSDS-OHS, NAPRALERT, NIOSHTIC, PDLCOM*, PIRA,
 PROMT, RTECS*, SPECINFO, TOXCENTER, TULSA, ULIDAT, USAN, USPAT2,
 USPATFULL, VETU, VTB
 (*File contains numerically searchable property data)
 Other Sources: DSL**, EINECS**, TSCA**
 (**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

62295 REFERENCES IN FILE CA (1907 TO DATE)
 5458 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
 62349 REFERENCES IN FILE CAPLUS (1907 TO DATE)
 19 REFERENCES IN FILE CAOLD (PRIOR TO 1967)